

IN THE DRAWINGS:

The attached sheets of drawings include changes to Figures 1 and 2. These sheets replace the original sheets including Figures 1 and 2. Specifically, Applicants have amended Figure 1 to include a descriptive label associated with each of reference numerals 4a, 8-12, and 15-17, and have amended Figure 2 to include a descriptive label associated with each of reference numerals 7a and 7b.

Attachment: Replacement Drawing Sheets for Figures 1 and 2

Annotated Drawing Sheets Showing the Changes to Figures 1 and 2

REMARKS

Applicants acknowledge with appreciation that the Examiner indicates that claims 3, 8, and 13 would be allowable if rewritten in independent format, including the limitations of their base claim and any intervening claims. Reconsideration of the above-captioned patent application is respectfully requested in view of the foregoing amendments and the following remarks.

By the foregoing amendments, claim 15 has been amended to correct a typographical error, and Figures 1 and 2 have been replaced by replacement Figures 1 and 2. Thus, claims 1-15 currently are pending and are subject to examination in the above-captioned patent application. No new matter is added and the foregoing amendments, and these amendments are fully supported by the specification.

In the Office Action mailed October 14, 2004, the Examiner objected to the drawings. Specifically, the Examiner indicates that Applicants are required to amend Figures 1 and 2 to include a descriptive label associated with each of the structural elements represented in the form of a rectangle in Figures 1 and 2. Applicants have amended Figures 1 and 2 to include a descriptive label associated with reference numerals 4a, 7a, 7b, 8-12, and 15-17. Therefore, Applicants respectfully request that the Examiner withdraw the objections to the drawings.

In the Office Action mailed October 14, 2004, the Examiner objected to claim 15 as allegedly including a typographical error. In accordance with the Examiner's suggestion, Applicants have amended claim 15 to replace the word: "compute" with the

word: "computer." Therefore, Applicants respectfully request that the Examiner withdraw the objection to claim 15.

In the Office Action mailed October 14, 2004, the Examiner also rejected claims 1, 4-6, 9-11, 14, and 15 under 35 U.S.C. § 102(b), as allegedly being anticipated by U.S. Patent No. 4,706,193 to Imajo et al. ("Imajo"). Moreover, the Examiner rejected claims 2, 7, and 12 under 35 U.S.C. § 103(a), as allegedly being rendered obvious by Imajo. Applicants respectfully traverse these rejections, as follows.

Applicants' independent claim 1 describes an engine oil degradation-determining system, comprising "degradation level parameter-correcting means for correcting the degradation level parameter in a direction of indicating a lower degradation level, when the detected oil level was equal to or lower than a **predetermined lower limit value** before stoppage of the engine, and is equal to or higher than a **predetermined upper limit value higher than the predetermined lower limit value** after start operation of the engine following the stoppage."

Applicants independent claim 6 describes a method comprising the step of "correcting the degradation level parameter in a direction of indicating a lower degradation level, when the detected oil level was equal to or lower than a **predetermined lower limit value** before stoppage of the engine, and is equal to or higher than a **predetermined upper limit value higher than the predetermined lower limit value** after start operation of the engine following the stoppage.

Moreover, Applicants' independent claim 11 describes "an engine control unit including a control program for causing a computer to determine a degradation level of

engine oil for lubricating an internal combustion engine, wherein the program causes the computer to . . . correct the degradation level parameter in a direction of indicating a lower degradation level, when the detected oil level was equal to or lower than a **predetermined lower limit value** before stoppage of the engine, and is equal to or higher than a **predetermined upper limit value higher than the predetermined lower limit value** after start operation of the engine following the stoppage.

Thus, each of independent claims 1, 6, and 11 includes a predetermined lower limit value of the oil level, and a predetermined upper limit value of the oil level (which is higher than the predetermined lower limit value). Moreover, the degradation level parameter is adjusted in a direction indicating a lower degradation when (1) before the engine is stopped, the oil level is less than or equal to the **predetermined lower limit value**, **AND** (2) after the engine is stopped and then subsequently started, the oil level is greater than the **predetermined upper limit value**. As such, Applicants' claimed invention does not need to use a sensor which accurately determines the exact level of the oil, which sensor, as set forth in Applicants' Description of Related Art, is expensive. See, e.g., Appl'n, Page 3, Lines 30-34; and Page 4, Lines 1-6.

In contrast, Imajo describes an oil degradation warning system in which when a driver puts an ignition key into an ignition key cylinder and turns the ignition key, a level sensor 14 detects the oil level. See, e.g., Imajo, Column 3, Lines 38-41. Then a comparison is made between the current level of the oil and the level of the oil previously memorized. See, e.g., *Id.* at Lines 41-44. When oil replenishment is carried out during a standstill of the engine, i.e., in between uses of the vehicle, the oil level which is read

when the ignition key is turned is greater than the previously memorized oil level. See, e.g., Id. at Column 4, Lines 18-22. When this occurs, an integrated value Y (representing operation history associated with the vehicle) is multiplied by a correction coefficient β . See, e.g., Id. at Lines 22-24. The correction coefficient β is determined in accordance with the ratio of the amount of oil added to the entire amount of oil after replenishment. See, e.g., Id. at Lines 24-27.

However, Imajo merely determines **whether the current level of the oil is greater than the previously memorized level of the oil**, and adjusts the integrated value Y in accordance with the new oil level. As such, Imajo only discloses the use of a **single** oil level value, i.e., the previously memorized oil level value, and Imajo does not disclose or suggest that the integrated value Y is adjusted in a direction indicating a lower degradation when (1) before the engine is stopped, the oil level is less than or equal to a **predetermined lower limit** value, **AND** (2) after the engine is stopped and then subsequently started, the oil level is greater than a **predetermined upper limit** value which is greater than the lower limit value. Moreover, because Imajo merely determines whether the current level of the oil is greater than the previously memorized level of the oil, and adjusts the integrated value based on the difference between the two oil levels, Imajo accurately measures the current level of the oil, which requires the use of an expensive sensor, such as the sensor described in Applicants' Description of Related Art. Further, Imajo does not use any "predetermined" values because Imajo compares two values that are obtained via a **measurement** taken by a single sensor, i.e., the value associated with the current oil level and the value associated with the previous oil level

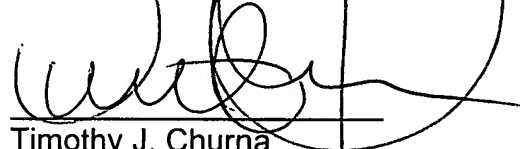
are measured values, and as such, neither are a “predetermined” value. Therefore, Applicants respectfully request that the Examiner withdraw the rejection of independent claims 1, 6, and 11 at least for these reasons.

Claims 2-5, 7-10, and 12-15 depend from allowable independent claims 1, 6, and 11, respectively. Therefore, Applicants respectfully request that the Examiner also withdraw the rejection of claims 2-5, 7-10, and 12-15.

CONCLUSION

Applicants respectfully submit that the above-captioned patent application is in condition for allowance, and such action is earnestly solicited. If the Examiner believes that an in-person or telephonic interview with Applicants' representatives would expedite the prosecution of the above-captioned patent application, the Examiner is invited to contact the undersigned attorney of records. Applicants believe that no fees are due as a result of this submission. Nevertheless, in the event of any variance between the fees determined by Applicants and those determined by the U.S. Patent and Trademark Office, please charge any such variance to the undersigned's Deposit Account No. 01-2300.

Respectfully submitted,

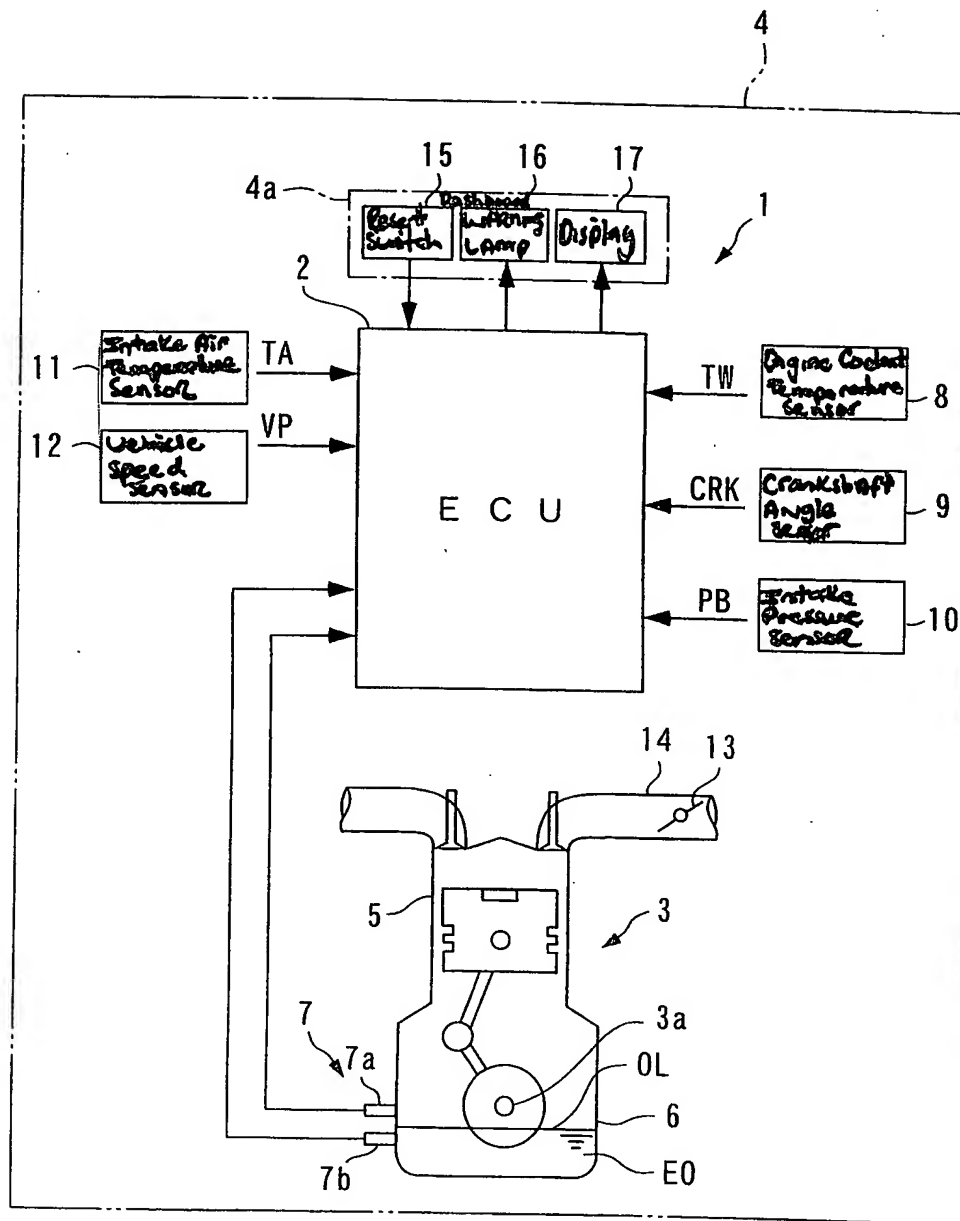


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FIG. 1





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FIG. 2

